Maine Turnpike Authority York County Kennebunk, Maine A-832-71-B-M

Departmental Findings of Fact and Order Air Emission License Amendment #1

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

- 1. The Maine Turnpike Authority (MTA) was issued Air Emission License A-832-71-A-N on August 8, 2002, permitting the operation of emission sources associated with their air sparge/soil vapor extraction system (AS/SVE) located in Kennebunk, Maine.
- 2. MTA has requested a minor revision to their license in order to revise the capacity of the AS/SVE system being installed.

B. Revision Description

The AS/SVE system previously licensed was to be equipped with a 2000-scfm Model 20 Remedi-Cat catalytic oxidizer. The vendor from whom this unit was to be leased has informed MTA that this particular model is not available at this time and has proposed substituting a 5000-scfm catalytic oxidizer.

The 5000-scfm catalytic oxidizer is equipped with a 2.0 MMBtu/hr burner, compared to the 1.0 MMBtu/hr burner in the Model 20. The 2.0 MMBtu/hr burner has a 40:1 turndown ratio and can operate efficiently at the 2000-scfm flow rate. The vendor has indicated that the heat exchanger is designed for 50 percent heat recovery (as was the Model 20), but because it will operate at less than half its design flow capacity, the anticipated heat recovery rate is 65 percent. Therefore, while potential fuel use is higher due to the larger burner, no increase in actual fuel use over the Model 20 is expected.

The rated destruction efficiency for the larger unit is the same as for the smaller unit (98-99%). Therefore, no increase in gasoline vapor emissions are expected as a result of this revision.

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C. Application Classification

This amendment will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this modification is determined to be a minor revision and has been processed as such.

D. Annual Emission Restrictions

MTA shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Allowable Annual Emission for the Facility

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	СО	voc	Total HAP
Burner	0.4	0.4	0.01	1.3	0.2	0.1	-
Process	-	1	-	1	-	3.9	2.0
Total TPY	0.4	0.4	0.01	1.3	0.2	4.0	2.0

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ORDER

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The Department hereby grants Air Emission License Minor Revision A-832-71-B-M subject to the conditions found in Air Emission License A-832-71-A-N and in addition to the following conditions:

The following are new Conditions:

This Order prepared by Lynn Ross, Bureau of Air Quality.

(20)	This	amendment	shall	expire	concurrently	with	Air	Emission	License
	A-832	2-71-A-N.							

DONE AND DATED IN AUGUSTA, MAINE TH	IS DAY OF	2003.
DEPARTMENT OF ENVIRONMENTAL PROTE	CTION	
BY:		
DAWN R. GALLAGHER, COMMISSION	NER	
PLEASE NOTE ATTACHED SHEET FO	OR GUIDANCE ON APPEAL PROCEDURES	
Date of initial receipt of application:	9/12/03	
Date of application acceptance:		
Date filed with the Board of Environmenta	l Protection:	